

What is claimed is:

- 1 1. A computer system, said computer comprising:
  - 2 a bus;
  - 3 a central processing unit;
  - 4 computer system memory, said computer system memory being connected to said
  - 5 central processing unit; and
  - 6 a memory management mechanism stored in said computer system memory, said
  - 7 memory management mechanism adjusting transaction priority to decrease transaction
  - 8 time and thereby permit more efficient journal space utilization.
- 1 2. The computer system of claim 1 wherein said memory management mechanism
  - 2 monitors elapsed time of outstanding transactions and selects an oldest transaction
  - 3 therefrom, said memory management mechanism then adjusting a priority of said oldest
  - 4 transaction so that said oldest transaction is able to complete processing more quickly.
- 1 3. The computer system of claim 2 wherein said memory management mechanism is a
  - 2 commit control mechanism.
- 1 4. The computer system of claim 2 wherein said memory management mechanism
  - 2 continually monitors elapsed time of said outstanding transactions and selects therefrom a
  - 3 current oldest transaction for which to adjust priority such that more than one transaction
  - 4 can operate with an adjusted priority.
- 1 5. The computer system of claim 2 wherein said transaction involves more than one job
  - 2 and wherein one of said more than one job executes on a first computer system and
  - 3 another of said jobs executes on a second computer system.

1 6. A program product, said program product comprising:

2 signal bearing medium; and

3 a memory management mechanism stored in said computer system memory, said  
4 memory management mechanism adjusting transaction priority to decrease transaction  
5 time and thereby permit more efficient journal space utilization.

1 7. The program product of claim 6 wherein said memory management mechanism  
2 monitors elapsed time of outstanding transactions and selects an oldest transaction  
3 therefrom, said memory management mechanism then adjusting a priority of said oldest  
4 transaction so that said oldest transaction is able to complete processing more quickly.

1 8. The program product of claim 6 wherein said memory management mechanism is a  
2 commit control mechanism.

1 9. The program product of claim 6 wherein said memory management mechanism  
2 continually monitors elapsed time of said outstanding transactions and selects therefrom a  
3 current oldest transaction for which to adjust priority such that more than one transaction  
4 can operate with an adjusted priority.

1 10. The program product of claim 6 wherein said oldest transaction involves more than  
2 one job and wherein one of said more than one job executes on a first computer system  
3 and another of said jobs executes on a second computer system.

- 1 11. A computer implemented method, said method comprising the steps of:  
  
2 receiving a journal related request; and  
3 adjusting transaction priority to decrease transaction time and thereby permit more  
4 efficient journal space utilization.
  
- 1 12. The method of claim 11 wherein said adjusting step further comprises:  
  
2 monitoring elapsed time of outstanding transactions;  
3 selecting an oldest transaction from said outstanding transactions; and  
4 adjusting a priority of said oldest transaction so that said oldest transaction is able to  
5 complete processing more quickly.
  
- 1 13. The method of claim 12 wherein said monitoring step comprises continually  
2 monitoring elapsed time of said outstanding transactions and wherein said selecting step  
3 comprises selecting a current oldest transaction from said outstanding transactions such  
4 that more than one transaction can be adjusted to operate with an adjusted priority in said  
5 adjusting step.
  
- 1 14. The method of claim 11 wherein said oldest transaction involves more than one job  
2 and wherein one of said more than one job executes on a first computer system and  
3 another of said jobs executes on a second computer system.
  
- 1 15. A computer implemented method, said method comprising the steps of:  
  
2 receiving a journal related request for a journal;  
3 adjusting transaction priority for a specific transaction to decrease transaction time of  
4 said transaction; and

5       deallocating memory associated with said specific transaction upon completion of said  
6 specific transaction.

1   16. The method of claim 15 wherein said adjusting step further comprises:

2       monitoring elapsed time of outstanding transactions;  
3       selecting an oldest transaction from said outstanding transactions; and  
4       adjusting a priority of said oldest transaction so that said oldest transaction is able to  
5 complete processing more quickly.

1   17. The method of claim 16 wherein said monitoring step comprises continually  
2 monitoring elapsed time of said outstanding transactions and wherein said selecting step  
3 comprises selecting a current oldest transaction from said outstanding transactions such  
4 that more than one transaction can be adjusted to operate with an adjusted priority in said  
5 adjusting step.

1   18. The method of claim 15 wherein said oldest transaction involves more than one job  
2 and wherein one of said more than one job executes on a first computer system and  
3 another of said jobs executes on a second computer system.